



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8

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SEP 12 2001

Ref: 8EPR-EP

Andy Cadenhead, ID Team Leader

USDA Forest Service

925 Weiss Drive

Steamboat Springs, CO 80487

Re: Medicine Bow – Routt National Forests
Bark Beetle Analysis Draft Environmental
Impact Statement

Dear Mr. Cadenhead:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, the Region 8 Office of the United States Environmental Protection Agency (EPA) has reviewed the *Bark Beetle Analysis Draft Environmental Impact Statement*, dated July 2001. The United States Forest Service (USFS) proposes to control Spruce Beetle (SB) and Mountain Pine Beetle (MPB) outbreaks through protective spraying of 3,100 trees and suppression activities on up to 300,000 acres within the Medicine Bow – Routt National Forests, within the Hahns Peak/Bears Ears Ranger District in Routt County, Colorado. The USFS also proposes to implement preventative thinning on 2,845 acres to avert the predicted beetle epidemic and degeneration of the resource value in certain management areas.

This DEIS analysis essentially describes two Forest Service decisions: 1) how to appropriately suppress and/or protect certain areas from beetle outbreaks through adaptive management, and 2) how to prevent beetle epidemics in certain highly valued areas. Alternatives analyzed range from No Action (A), to suppression and thinning activities of varying degrees. Alternative B is the proposed action described above. Alternative C and D incrementally increase the amount of acres thinned, roads constructed and intensity of suppression actions. Alternative E includes suppression actions, but does not include thinning as a management tool. Regarding the first decision, EPA generally supports the USFS's proposed protective spraying and suppression actions. We agree with the USFS's emphasis of this project in recognizing the futility of *stopping* a beetle epidemic and concentrating management actions instead on the most highly valued resource areas (ski, timber management, campgrounds, etc.). Considering the susceptibility and recurrence of beetle epidemics throughout the Rocky Mountain regional landscape, we appreciate



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this innovative, adaptive approach to pest management and support the precedent-setting nature of its flexibility in consideration of ecosystem processes.

Environmental Impacts

Regarding the second decision, EPA has several environmental concerns and generally does not support thinning in order to pro-actively deter beetle outbreaks from certain stands. We understand that the purpose of managing a beetle epidemic is to prevent severe ecosystem alteration through excessive tree mortality on valuable lands. Thus, substantially changing the structure of a stand through thinning and the creation of greater than 9.25 miles of new roads seems contradictory to this intention. Additionally, although thinning has shown some success for the MPB, potential success of this technique as beetle deterrence for the SB is greatly uncertain, and SB poses the greatest threat at this time (p.11). Given this uncertainty in light of the environmental costs, EPA does not agree that the investment necessary for thinning activities is warranted, unless the stands in question were already scheduled to be thinned as part of pre-harvest, timber resource maintenance activities. Therefore, EPA would select Alternative E as the environmentally-preferred alternative for beetle management on the Medicine Bow – Routt, which is identical to the Proposed Action (Alternative B/Preferred Alternative) in protective and suppression actions, but does not include thinning as a preventative technique.

Adaptive Management

The adaptive management described in the DEIS minimizes the number of times an area can be treated. Not only do the abandonment thresholds (p.23) provide a mechanism for economic efficiency, but the ecological impacts of repeated entry into stands (soil compaction, wildlife disruption, etc.) will be minimized. In the spirit of the adaptive management techniques proposed in the DEIS, we offer a few additional recommendations that may help foster the successful administration of this project. These include: 1) constructing and analyzing “pre-treatment thresholds” that define area selection priorities for entering a stand, 2) a method for tiering incremental decisions from this DEIS, and 3) including a monitoring implementation plan or built-in continuous monitoring assurances. An explanation of these suggestions follows:

1. *Construct and analyze “pre-treatment thresholds” that define resource area selection priorities for entering a stand:* The FEIS should include additional analysis that describes the value schedule for resource allocation, i.e. where will management activities begin and what are the criteria that will be used to prioritize for treatment or suppression (population of insects/level of infestation, value of timber, proximity to private land, recreation experience, etc.)? We understand that, because the USFS has decided not to attempt forest-scale management on all 672,000 acres in the Hans Peak-Bears Ears Ranger District (p.7), only certain areas (roughly 300,000 acres) within the forest boundary were analyzed in the DEIS (Introduction). Additionally, we understand that the USFS does not expect to *have to* enact *all* the management activities on all the areas described in the DEIS. Therefore, additional decisions will necessarily have to be made regarding which stands in the forest the USFS will concentrate their first efforts and what will dictate or direct the incremental decisions tiered off this document. Explicit criteria

should be laid out beforehand in order for the public to fully understand future decisions, priorities and treatment areas.

2. *Describe a method for tiering incremental decisions from this DEIS:* Due to the unpredictable nature of beetle infestations, we recognize that a series of smaller decisions will be made in response to new outbreaks. Using an “adaptive management” approach, tiered decisions give leeway to evaluate each new action against the original purpose and need as new information and methods are developed. Once the thresholds recommended above have been established, an implementation mechanism, or specified decision tree will help guide timely reactions to new beetle infestations. In the FEIS and ROD, the USFS must describe the specific decision *process*, including the opportunities for public input on site-specific actions and notices as described in the DEIS (Summary).

The only concern we have regarding the use of this EIS as a “programmatic” document from which many decisions are tiered is proper analysis of cumulative impacts of each individual action. Because what has been described in the DEIS is a maximum situation of possible management areas and techniques, no further effects are expected. However, as “connected actions,” it will be important to disclose an overall project or cumulative perspective in each decision notice.

Additionally, a decision tree should include whole actions. This includes the prescription plus BMPs, restoration and monitoring for each individual project. Otherwise, we caution about the potential for these multiple decisions to segment individual actions; for example, budget restrictions may change a project dictating thinning, road obliteration, streamside restoration and monitoring to merely thinning while “postponing” the other project elements. There needs to be some assurance built into the decision tree that whole projects will be completed before other areas are begun. Furthermore, each new decision phase notice should disclose an overview of the attempts and successes in other areas of the forest.

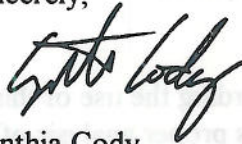
3. *Include a monitoring implementation plan or built-in continuous monitoring assurances:* The decision tree described above MUST include the designation of money for monitoring or have a built-in instrument through which the project stops if no monitoring is funded. Monitoring is essential to the adaptive character of this proposal. Pre-suppression monitoring will show the growing number of beetles, and if this number meets pre-treatment thresholds, then the decision tree will dictate the next group of actions. Post-action monitoring will show whether repeated entries are necessary, if the technique was successful or if the stand has met the abandonment threshold.

Based on the procedures EPA uses to evaluate the potential effects of proposed actions and the adequacy of the information in the DEIS, the Preferred Alternative identified by the DEIS for the *Bark Beetle Analysis* (Alternative B) will be listed in the Federal Register in the category EC-2. This rating means that the EPA has identified thinning as a potential significant impact that should be avoided in order to provide adequate protection to the environment, and that the FEIS

should include additional analysis/ description of the proposed adaptive management in order to make relevant decisions about these resources. We have enclosed a summary of EPA's rating criteria and definitions.

We appreciate your interest in our comments on this bark beetle management proposal. We also thank you for taking time to lead Amy Bergstedt on a site visit at the Medicine Bow – Routt Forest on August 9, 2001. The visit and ensuing discussions were extremely beneficial to our understanding of the landscape and beetle ecology in your forest. If you have any questions or want to discuss these comments, please contact Ms. Bergstedt at (303) 312-6647.

Sincerely,



Cynthia Cody,
Director, NEPA Program
Office of Ecosystems Protection and Remediation

Enclosure

cc: Elaine Suriano, EPA HQ